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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/405,777	09/27/1999	JOHN G. WACLAWSKY	CIS99-1717	9859

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EXAMINER

ODLAND, DAVID E

ART UNIT	PAPER NUMBER
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2662

DATE MAILED: 06/24/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/405,777

Applicant(s)

WACLAWSKY ET AL.

Examiner

David Odland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The following is a response to the amendments filed on 04/23/2003.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

3. Claims 7, 9, 22 and 24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7, 22 and 24 recites that the data within the data stream indicates that the host computer is the originator of the data stream (the stream is transmitted from the host to a recipient). This limitation is confusing; according to claim 1 the request signal source sends a request that would have normally been intended for the host computer but is intercepted. The intercepting node then communicates with the request signal source in deciding the manner in which to communicating the data streams, which implies that the request signal source is the originator of the data stream. Therefore, it is unclear how the host computer can be the originator of the stream.

Claim 9 recites, "...the step of receiving..." in line 2. There is a lack of antecedent basis for this limitation of the claim.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1,3,9 and 21-23, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Cave et al. (USPN 6,404,746), hereafter referred to as Cave.

Referring to claim 1, Cave discloses a method for controlling a data stream comprising the steps of:

at a node in a network, intercepting a request signal from a request signal source (the VRU receives a signal from a gateway 606 (see figure 3 and columns 12 and 23)), the request signal intended for a host computer that would otherwise respond with control information for controlling a manner in which the request signal source transfers the data stream (the signal normally would go to the gateway 626 at the receiving end which would respond with control information related to call signaling (see figure 3 and columns 12 and 13));

from the node intercepting the request signal:

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generating a control signal in response to intercepting the request signal (the VRU sends control signals to gateway 606 to redirect data to gateway 626 (see figure 3 and columns 12 and 13), the control signal including the control information for controlling the manner in which the request signal source transfers the data stream (the control signals from the VRU include signals for gateway 606 to redirect data to gateway 626 (see figure 3 and columns 12 and 13)); and

providing the control signal to the request signal source to individually control the manner in which the request signal source transfers the data stream among multiple data streams transferred by the request signal source (the control signal tell gateway 606 to send data to gateway 626, wherein such a data transfer is among one of a plurality data streams gateway 606 can transmit on (note, since the packet network in figure 3 is the Internet, gateway 606 can thus communicate multiple data streams) (see figure 3, columns 12 and 13 and claim 1)).

Referring to claim 3, Cave discloses the method discussed above. Furthermore, Cave discloses that the method further includes the steps of forming the control signal without communicating with the host computer in response to request signal (gateway 606 can directly communicate with gateway 626 without interception by the VRU (see figure 3)).

Referring to claim 9, Cave discloses the method discussed above. Furthermore, Cave discloses that the request signal is an inter-process communication signal, and wherein the step of receiving the request signal includes the step of obtaining, by a host agent operating within the data communications device and acting on behalf of the host computer, the request signal from the request signal source through an inter-process communication interface of the host agent (the signal from gateway 606 is received by the data processor and the data processor controls the

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way the data is communicated to gateway 626 and thus acts on behalf of the way gateway 626 would have set up the communication itself (see figure 3 and columns 12 and 13)).

Referring to claim 21, Cave discloses a network including a source that transmits a data stream to a recipient (telephone 618 transmits data to telephone 630 (see figure 3 and columns 12 and 13)), an apparatus comprising: a routing mechanism disposed at an intermediate node of the network between the source and the recipient to route the data stream (gateway 606 is located between the two telephones and routes the data stream between them (see figure 3 and columns 12 and 13)), the routing mechanism sending a request signal for instructions how to maintain the data stream (gateway 606 informs the VRU that it is transmitting a call and the VRU responds with how to send the call (see figure 33 and columns 12 and 13)); and a host agent disposed at a node of the network other than at the source or recipient (a VRU is not located at the source of the recipient (see figure 3 and columns 12 and 13)), the host agent configured to receive the request signal and provide control instructions how to maintain the data stream (the VRU inherently receives an indication that the gateway is transmitting a call and sends control signals to the gateway regarding how the call should be handled (see columns 12 and 13 and figure 3)).

Referring to claim 22, Cave discloses the system discussed above. Furthermore, Cave discloses that the step of intercepting a request signal includes: receiving the request signal from the request signal source (an indication from gateway 606 is inherently received when the gateway is going to transmit a data stream (see figure 3 and columns 12 and 13)), the request signal being disposed at an intermediate node of the network (the indication goes to the VRU of the network (see figure 3 and columns 12 and 13)), the request signal source routing the data stream from the host computer to a recipient computer (data is routed from gateway 606 to

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gateway 626 and ultimately to an end user such as telephone 630 (see figure 3 and columns 12 and 13)).

Referring to claim 23, Cave discloses the system discussed above. Furthermore, Cave discloses that the step of intercepting a request signal includes: receiving the request signal at an intermediate node of the network other than a node of the request signal source (inherently, an indication from the gateway is sent to the VRU which is at an intermediate node of the network (see figure 3 and columns 12 and 13)).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2,5,6-8,10-12,14-20, 24 and 25, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave.

Referring to claim 10, Cave discloses a data communications device (a voice response unit (VRU) (see figure 3)), comprising:

memory that stores an application (a memory which stores applications (see item 622 of figure 3)); and

a controller coupled to a port and the memory (a data processor coupled to an Ethernet port and the memory (see item 620 in figure 3)), an agent process running on the controller when the controller operates in accordance with the application stored in the memory such that the

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agent (the data processor is running an application that mediates between gateways of the network (see figure 3)):

receives a request signal from a request signal source (the VRU receives a signal from a gateway 606 (see figure 3 and columns 12 and 23)), the request signal intended for a host computer that would otherwise respond with control information for controlling a manner in which the request signal source transfers the data stream (the signal normally would go to the gateway 626 at the receiving end which would respond with control information related to call signaling (see figure 3 and columns 12 and 13));

generates a control signal in response to receiving the request signal (the VRU sends control signals to gateway 606 to redirect data to gateway 626 (see figure 3 and columns 12 and 13), the control signal including the control information for controlling the manner in which the request signal source transfers the data stream (the control signals from the VRU include signals for gateway 606 to redirect data to gateway 626 (see figure 3 and columns 12 and 13)); and

provides the control signal to the request signal source to individually control the manner in which the request signal source transfers the data stream among multiple data streams transferred by the request signal source (the control signal tell gateway 606 to send data to gateway 626, wherein such a data transfer is among one of a plurality data streams gateway 606 can transmit on (note, since the packet network in figure 3 is the Internet, gateway 606 can thus communicate multiple data streams) (see figure 3, columns 12 and 13 and claim 11)).

Cave does not explicitly disclose that the VRU has multiple network ports. However, it would have been obvious to one skilled in the art at the time of the invention to including multiple ports

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In the VRU of Cave, because doing so would allow the VRU to communicate with more nodes at the same time and thereby speed up the system of Cave.

Referring to claim 2 and 11, Cave discloses the system discussed above. Cave does not disclose that the request signal source is a data communications mechanism operating within the data communications device. However, it would have been obvious to one skilled in the art at the time of the invention to include the gateway 606 within the VRU as a whole system because doing so would allow the system of Cave to operated faster since the VRU would not have to communicate over the packet network 602 (Internet) and experience possible delays.

Referring to claims 5 and 14, Cave discloses the communications method as discussed above. Furthermore, Cave discloses that the data stream is a multicast session (the signals can be of a broadcast type and multi-party conferencing (see figure 3 and column 21)). Cave does not disclose that the control information of the control signal includes Internet Group Management Protocol instructions. However, it would have been obvious to one skilled in the art at the time of the invention to have the control signal, in the system disclosed by Cave, include Internet Group Management Protocol (ICMP) instructions because ICMP is a standardized communications protocol that uses a multicast address to distinguish between sets of recipients for multicast packets in a network and therefore it would be faster to implement rather than developing a new protocol.

Referring to claims 6 and 15, Cave discloses the communications method as discussed above. Cave does not disclose that the agent further performs an operation that decides whether to contact the host computer for assistance in response to the request signal, a result of the operation directing the data communications device not to contact the host computer in response

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to the request signal. However, it would have been obvious to one skilled in the art at the time of the invention to perform such as operation in the system of Cave because avoiding the step of having to contact the viewer client would reduce network traffic and increase the available bandwidth, which can be used by other network nodes.

Referring to claims 7 and 16, Cave discloses the method discussed above. Cave does not disclose that the data within the data stream indicates that the host computer is an originator of the data stream. However, it would have been obvious to one skilled in the art at the time of the invention to have the gateway 626 originate the data since doing so is merely a matter of design choice (i.e. the VRU could have worked with gateway 626 in transporting data to gateway 606 as a choice of design (see figure 3)).

Referring to claims 8 and 17, Cave discloses the communications method as discussed above. Cave does not disclose that the data within the request signal indicates that the host computer is an intended recipient of the request signal. However, it would have been obvious to one skilled in the art at the time of the invention to include within the data stream of Cave which nodes are recipients of the data stream because such information will provide for the proper routing of the stream to its intended destination.

Referring to claim 12, Cave discloses the method discussed above. Furthermore, Cave discloses that the method further includes the steps of forming the control signal without communicating with the host computer in response to request signal (gateway 606 can directly communicate with gateway 626 without interception by the VRU (see figure 3)).

Referring to claim 18, Cave discloses the method discussed above. Furthermore, Cave discloses that the request signal is an inter-process communication signal, and wherein the step

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of receiving the request signal includes the step of obtaining, by a host agent operating within the data communications device and acting on behalf of the host computer, the request signal from the request signal source through an inter-process communication interface of the host agent (the signal from gateway 606 is received by the data processor and the data processor controls the way the data is communicated to gateway 626 and thus acts on behalf of the way gateway 626 would have set up the communication itself (see figure 3 and columns 12 and 13)).

Referring to claim 19, Cave discloses the of a device that performs the steps of:

intercepting a request signal from a request signal source (the VRU receives a signal from a gateway 606 (see figure 3 and columns 12 and 23)), the request signal intended for a host computer that would otherwise respond with control information for controlling a manner in which the request signal source transfers the data stream (the signal normally would go to the gateway 626 at the receiving end which would respond with control information related to call signaling (see figure 3 and columns 12 and 13));

generating a control signal in response to intercepting the request signal (the VRU sends control signals to gateway 606 to redirect data to gateway 626 (see figure 3 and columns 12 and 13), the control signal including the control information for controlling the manner in which the request signal source transfers the data stream (the control signals from the VRU include signals for gateway 606 to redirect data to gateway 626 (see figure 3 and columns 12 and 13)); and

providing the control signal to the request signal source to individually control the manner in which the request signal source transfers the data stream among multiple data streams transferred by the request signal source (the control signal tell gateway 606 to send data to gateway 626, wherein such a data transfer is among one of a plurality data streams gateway 606

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can transmit on (note, since the packet network in figure 3 is the Internet, gateway 606 can thus communicate multiple data streams) (see figure 3, columns 12 and 13 and claim 11)).

Cave does not disclose that the method is performed through the use of a computer program.

However, it is well known in the art that software has a much lower development cost and is much easier to upgrade than hardware. For these reasons, it would have been obvious to one skilled in the art at the time of the invention to implement the method disclosed in Cave through the use of a program.

Referring to claim 20, Cave discloses the system discussed above. Furthermore, Cave discloses that the communications device directs operation of the request signal source (the VRU directs the manner in which gateway 606 transmits data (see columns 12 and 13 and figure 3)) . Cave does not disclose that the request signal source is a data communications mechanism operating within the data communications device. However, it would have been obvious to one skilled in the art at the time of the invention to include the gateway 606 within the VRU as a whole system because doing so would allow the system of Cave to operate faster since the VRU would not have to communicate over the packet network 602 (Internet) and experience possible delays. Cave also does not disclose that the method is performed through the use of a computer program. However, it is well known in the art that software has a much lower development cost and is much easier to upgrade than hardware. For these reasons, it would have been obvious to one skilled in the art at the time of the invention to implement the method disclosed in Cave through the use of a program.

Referring to claim 24, Cave discloses the system discussed above. Furthermore, Cave discloses that the request signal source is disposed at an intermediate node of the network

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(gateway 606 is at an intermediate node of the network (see figure 3 and columns 12 and 13)) and the request signal source routes the data stream from the host computer to a recipient computer (gateway 606 routes the data to gateway 626 and ultimately a recipient user such as telephone 630 (see figure 3 and columns 12 and 13)).

Referring to claim 25, Cave discloses the system discussed above. Furthermore, Cave discloses that the controller running the agent process is disposed at an intermediate node of the network other than that of the request signal source (the VRU is at a node other than gateway 606)).

8. Claims 4 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cave in view of U.S. Patent number 6,014,694 to Aharoni et al., hereafter referred to as Aharoni.

Referring to claims 4 and 13, Cave discloses the communication system as discussed above. Cave does not disclose that the data stream is a ReSerVation Protocol session, and the control information of the control signal includes ReSerVation Protocol instructions. However, Aharoni discloses an audio/video transmission system with uses a reservation protocol (RSVP) to reserve bandwidth and provide quality of service features of the protocol (see column 7 lines 35-43)). Therefore, it would have been obvious to one skilled in the art at the time of the invention to utilize a reservation protocol, as taught in Aharoni, in the system of Cave, because doing so would make the system of Cave more reliable by reserving bandwidth and providing quality of service features.

Response to Arguments

9. Applicant's arguments with respect to claims 1,10 and 19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Odland, who can be reached at (703) 305-3231 on Monday – Friday during the hours of 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached at (703) 305-4744. The fax number for the organization where this application or proceeding is assigned is (703) 872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist, who can be reached at (703) 305-4750.

deo

June 18, 2003



HASSAN KIZOU
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TECHNOLOGY CENTER 2600